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RICKETTSIA FELIS OUTER MEMBRANE PROTEIN

ABSTRACT OF THE DISCLOSURE

The present invention is directed to isolated
5 nucleic acid molecules encoding Rickettsia felis outer
membrane proteins (R. felis omp). Expression vectors and
host cells comprising the nucleic acid molecules are also
provided, as well as methods for increasing or decreasing
the expression of R. felis omp in host cells. The
10 invention further provides a method of screening a
substance for the ability of the substance to modify R.
felis omp function, and a method for isolating other R.
felis omp molecules. DNA oligomers capable of
hybridizing to the nucleic acid molecule encoding the R.
15 felis omp are provided, which can be used to detect R.
felis omp in a sample. An isolated R. felis omp is also
provided. Antibodies specific for the protein, and
fragments thereof, are provided, as are compositions
comprising the protein and a compatible carrier. The
20 subject invention further provides a method of preventing
R. felis infections by R. felis present in a carrier
host, and a method of reducing R. felis infection of a
carrier host.